EBASCO SERVICES INCORPORATED

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IEPA-90-20

June 19, 1990

Dr. Roy Ball
Project Manager
ERM - North Central, Inc.
102 Wilmont Road, Suite 300
Deerfield, IL 60015

Subject: U.S.EPA's Comments on the Lenz Oil Service, Inc. RI/FS Work Plan, and Soil Sampling and Analyses

Dear Dr. Ball:

Attached is our input to help you respond to specific comments and questions that U.S.EPA presented in their letter dated May 22, 1990. Our response addresses the work Ebasco performed as the Illinois Environmental Protection Agency's (IEPA) contractor in developing the soil sampling plan. Responses pertaining to the work performed during soil remediation are based on available information provided by the IEPA.

If you have any questions regarding the attached comments, please call me at (312) 876-0262 or David Dollins (IEPA) at (212) 782-6760.

Sincerely,

EBASCO SERVICES INCORPORATED

Raja Venkateswar
Principal Chemical Engineer

cc: D. Dollins (IEPA)
N. Gowda (U.S.EPA)
G. Mattson (Ebasco)
K. Webb (Ebasco)
M. Furse (Katten Muchin & Zavis)

LENZ OIL SERVICE, INC. SITE
RESPONSE TO COMMENTS ON THE WORK PLAN

Section	Page	Paragraph	Response/Comments
5.2.1.1	5-3	3	Available information indicates only one lagoon area as depicted in Figures 2-2 and 5-2. Please change the word "areas" to "area".
5.2.1.1	5-14	1	The volume of excavated soil from the former lagoon area is presently unknown. The lagoon was backfilled with clean material. No VisQueen was installed in the former lagoon area. The IEPA is currently investigating the comments pertaining to the Lenz Oil Review committee meeting held on December 9, 1987 at Burr Ridge. The VisQueen installed at the site was 20 mil (0.002 inch) thick and not 10 mil as originally mentioned. According to information collected from manufacturers of the product, no published data exists on the life span of VisQueen because it would depend on the application and site specific conditions. However, the manufacturers indicate that the 20 mil grade of VisQueen is designed for lining ponds and lagoons. The VisQueen was manually installed in the main excavation area and overlapping layers of VisQueen were heat sealed. The liner entirely covers the sides and overlays the level ground surrounding the excavated area.

Section	Page	Paragraph	Response/Comments
			No installation information was found in the IEPA files to document how monitoring well G105 was protected during excavation or the liner installed to prevent groundwater from leaking up between the well casing and VisQueen.
			According to the current estimates, a total of 21,000 tons of soil were excavated from the site. How much of this was from the main excavation area and how much from other areas surrounding the main excavation area is presently unknown. The bedrock ranges from 6 to 25 feet below the ground surface at the site. However, in the majority of the areas on site, the bedrock was encountered at 10 to 11 feet.
5.2.1.3	5-15		Soil sampling beneath the VisQueen layer cannot be implemented in a cost effective manner without drilling through the VisQueen. Drilling through the VisQueen will compromise the integrity of the liner and produce a potential route for the contaminated groundwater to come into contact with the ash and clean backfill material.
			On Page 5-6, paragraph 3. please delete the reference to the flushing of contaminated material by groundwater movement.
5.2.1.3	5-15		Please note the approximate location of the incinerator on the attached Figure 3-1.

Section	Page	Paragraph	Response/Comments
5.2.1.3	5-16	1	One soil boring will be drilled in the dark stained area if this area can be located and identified during the field investigation. The boring will be drilled to a depth of 5 feet and split spoon samples will be taken at 0-3 foot and 3-5 foot intervals and screened for a presence of volatile organics using a Photo Ionization Detector (PID) or equivalent. If the PID registers a reading below 5 ppm in these depth intervals, one confirmatory sample will be collected for laboratory analysis for the 3-5 foot interval. If the PID registers a reading above 5 ppm, in the 3-5 foot interval, the depth of the soil boring will be extended to an additional 5 feet and this procedure repeated. Soil borings will be continued until bedrock is encountered or volatile organics are no longer detected above 5 ppm. We do not have records that indicate the specific location of the dark stain on the map and suggest that this area be located during the field investigation using the areal photo.
5.2.1.3	5-16	4	To adequately sample the former lagoon area, the IEPA proposes to relocate soil boring SB13 as indicated in the attached Figure 3-1, and drill two additional soil borings, SB17 and SB18 within the lagoon area, approximately 50 feet apart. SB17 and SB18 will be sampled in the same way as proposed for SB13. The inclusion of the locations of former impoundments, pits and lagoons on subject figures should be addressed by PRPs.

Section	Page	Paragraph	Response/Comments
	Figure 5-2		Figure 5-2 is adopted from Figure 3-1 of Appendix B. Figure 3-1 in the Sampling and Analysis Plan, as originally submitted, is 11" x 17" in size and all symbols and legends are readable. The readability was lost when the figure size was reduced to 8 1/2" x 11". Additional 11" x 17" copies can be made available. PRPs should address identification of wells G104L and G104D. The IEPA's previous sampling locations numbered 1 through 8 were indicated on Figure 3-1 to correspond with available analytical results. Additional sample locations, SB01 through SB12, were proposed in the Sampling and Analysis Plan to justify that the horizontal extent of excavation was sufficient. PRPs should address revising figures to show correct location of fence line.
5.2.1.3	5-18	1	Please make the changes as recommended to include metals.

SAMPLING AND ANALYSIS PLAN
APPENDIX A

Section	Page	Paragraph	Response/Comment
		Figure 1-1	PRPs should address this.
2.1	3	1	PRPs should address this. Soil sampling beneath the VisQueen through the liner should be avoided as it will provide a potential route for contaminated groundwater to contact clean ash and backfill material.
2.1	4		Confirmatory soil samples were collected and analyzed to ensure that they were clean before soil excavation was stopped. However, the location of these samples is not clear from a review of existing analytical data on the site.
3.2		General	PRPs should address this.
		Figure 3-1	PRPs should address this.
3.2	6	3	PRPs should address this.
Appendix B	3		Please incorporate the editorial comment addressing vertical extent of contamination as presented in the USEPA letter.